

Notice of Allowability

Application No.

10/718,990

Examiner

Sow-Fun Hon

Applicant(s)

LIANG ET AL.

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the supplemental amendment filed 04/03/06.
2. ☒ The allowed claim(s) is/are 1-18,50 and 51.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date 04122006.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 3/30/06.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Viola Kung on March 30, 2006.

The application has been amended as follows:

2. Claim 18: Line 5: Delete "second".
3. Claim 18: Line 6: After "composition having a specific gravity lower than that of the", delete "second".

Drawings

4. The following changes to the drawings have been approved by the examiner and agreed upon by Applicant: Figures 1 (a-c) and 2(a-c) must include the word "Fig." in the labels, e.g "Fig. 1a" instead of just "1a". In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

5. The following is an examiner's statement of reasons for allowance: the closest cited prior art of record:

US 6,304,309 fails to teach or suggest, even in view of US 4,798,849, US 6,067,135 and CA 2,340,683, the combination of a liquid crystal display comprising microcups as display cells which are:

- a) formed from a microcup composition comprising a thermoplastic, a thermoset or a precursor thereof and a first liquid crystal composition, filled with a second liquid crystal composition, and sealed with a sealing layer formed from a sealing composition having a specific gravity lower than that of the second liquid crystal composition; or
- b) formed from a microcup composition comprising a thermoplastic, a thermoset or a precursor thereof and a speed enhancing comonomer or oligomer, filled with a liquid crystal composition, and sealed with a sealing layer formed from a sealing composition having a specific gravity lower than that of the liquid crystal composition, wherein said display comprises two or more layers of microcups.

None of the references teach that the microcup filled with a liquid crystal composition is sealed with a sealing layer formed from a sealing composition having a specific gravity lower than that of the liquid crystal composition. The terminal disclaimer and statement of common ownership have disqualified US 6,784,953, US 6,795,138 and US 6,833,177 as prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1772

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Hon

Sow-Fun Hon

04/27/06

[Signature]
HAROLD PYON
SUPERVISORY PATENT EXAMINER

1772

4/28/06